

RAW SEQUENCE LISTING

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Application Serial Number: 10/553,904
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IFWP

RAW SEQUENCE LISTING
PATENT APPLICATION: US/10/553,904

DATE: 03/08/2007
TIME: 12:25:22

Input Set : A:\53694131.APP
Output Set: N:\CRF4\03082007\J553904.raw

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3 <110> APPLICANT: BJORK, LARS
4      HERWALD, HEIKO
5      MORGELIN, MATTHIAS
6      RUSSELL, WAYNE
7      NORRBY-TEGLUND, ANNA
8      LINDBOM, LENNART
9      SOLLENBERG, ULLA
10     CRAMER, HENNING
11     FLODGAARD, HANS
13 <120> TITLE OF INVENTION: METHOD FOR IDENTIFYING AN ANTI-STREPTOCOCCAL AGENT AND
14 ITS USE FOR TREATING STREPTOCOCCAL INFECTIONS
16 <130> FILE REFERENCE: 053694-0131
18 <140> CURRENT APPLICATION NUMBER: 10/553,904
19 <141> CURRENT FILING DATE: 2005-10-21
21 <150> PRIOR APPLICATION NUMBER: PCT/EP04/004429
22 <151> PRIOR FILING DATE: 2004-04-23
24 <150> PRIOR APPLICATION NUMBER: GB 0309246.7
25 <151> PRIOR FILING DATE: 2003-04-23
27 <150> PRIOR APPLICATION NUMBER: GB 0329112.7
28 <151> PRIOR FILING DATE: 2003-12-16
30 <160> NUMBER OF SEQ ID NOS: 11
32 <170> SOFTWARE: PatentIn Ver. 3.3
34 <210> SEQ ID NO: 1
35 <211> LENGTH: 484
36 <212> TYPE: PRT
37 <213> ORGANISM: Streptococcus pyogenes
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43 Thr Gly Thr Ala Ser Val Ala Val Ala Leu Thr Val Leu Gly Ala Gly
44      20          25          30
46 Phe Ala Asn Gln Thr Glu Val Lys Ala Asn Gly Asp Gly Asn Pro Arg
47      35          40          45
49 Glu Val Ile Glu Asp Leu Ala Ala Asn Asn Pro Ala Ile Gln Asn Ile
50      50          55          60
52 Arg Leu Arg Tyr Glu Asn Lys Asp Leu Lys Ala Arg Leu Glu Asn Ala
53      65          70          75          80
55 Met Glu Val Ala Gly Arg Asp Phe Lys Arg Ala Glu Glu Leu Glu Lys
56      85          90          95
58 Ala Lys Gln Ala Leu Glu Asp Gln Arg Lys Asp Leu Glu Thr Lys Leu
59      100         105         110
61 Lys Glu Leu Gln Gln Asp Tyr Asp Leu Ala Lys Glu Ser Thr Ser Trp
62      115         120         125

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64 Asp Arg Gln Arg Leu Glu Lys Glu Leu Glu Glu Lys Lys Glu Ala Leu
 65 130 135 140
 67 Glu Leu Ala Ile Asp Gln Ala Ser Arg Asp Tyr His Arg Ala Thr Ala
 68 145 150 155 160
 70 Leu Glu Lys Glu Leu Glu Lys Lys Lys Ala Leu Glu Leu Ala Ile
 71 165 170 175
 73 Asp Gln Ala Ser Gln Asp Tyr Asn Arg Ala Asn Val Leu Glu Lys Glu
 74 180 185 190
 76 Leu Glu Thr Ile Thr Arg Glu Gln Glu Ile Asn Arg Asn Leu Leu Gly
 77 195 200 205
 79 Asn Ala Lys Leu Glu Leu Asp Gln Leu Ser Ser Glu Lys Glu Gln Leu
 80 210 215 220
 82 Thr Ile Glu Lys Ala Lys Leu Glu Glu Lys Gln Ile Ser Asp Ala
 83 225 230 235 240
 85 Ser Arg Gln Ser Leu Arg Arg Asp Leu Asp Ala Ser Arg Glu Ala Lys
 86 245 250 255
 88 Lys Gln Val Glu Lys Asp Leu Ala Asn Leu Thr Ala Glu Leu Asp Lys
 89 260 265 270
 91 Val Lys Glu Asp Lys Gln Ile Ser Asp Ala Ser Arg Gln Gly Leu Arg
 92 275 280 285
 94 Arg Asp Leu Asp Ala Ser Arg Glu Ala Lys Lys Gln Val Glu Lys Asp
 95 290 295 300
 97 Leu Ala Asn Leu Thr Ala Glu Leu Asp Lys Val Lys Glu Glu Lys Gln
 98 305 310 315 320
 100 Ile Ser Asp Ala Ser Arg Gln Gly Leu Arg Arg Asp Leu Asp Ala Ser
 101 325 330 335
 103 Arg Glu Ala Lys Lys Gln Val Glu Lys Ala Leu Glu Glu Ala Asn Ser
 104 340 345 350
 106 Lys Leu Ala Ala Leu Glu Lys Leu Asn Lys Glu Leu Glu Ser Lys
 107 355 360 365
 109 Lys Leu Thr Glu Lys Glu Lys Ala Glu Leu Gln Ala Lys Leu Glu Ala
 110 370 375 380
 112 Glu Ala Lys Ala Leu Lys Glu Gln Leu Ala Lys Gln Ala Glu Glu Leu
 113 385 390 395 400
 115 Ala Lys Leu Arg Ala Gly Lys Ala Ser Asp Ser Gln Thr Pro Asp Thr
 116 405 410 415
 118 Lys Pro Gly Asn Lys Ala Val Pro Gly Lys Gly Gln Ala Pro Gln Ala
 119 420 425 430
 121 Gly Thr Lys Pro Asn Gln Asn Lys Ala Pro Met Lys Glu Thr Lys Arg
 122 435 440 445
 124 Gln Leu Pro Ser Thr Gly Glu Thr Ala Asn Pro Phe Phe Thr Ala Ala
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 128 465 470 475 480
 130 Lys Glu Glu Asn
 134 <210> SEQ ID NO: 2
 135 <211> LENGTH: 4
 136 <212> TYPE: PRT
 137 <213> ORGANISM: Artificial Sequence

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139 <220> FEATURE:
 140 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
 141 peptide
 143 <400> SEQUENCE: 2
 144 Gly Pro Arg Pro
 145 1
 148 <210> SEQ ID NO: 3
 149 <211> LENGTH: 4
 150 <212> TYPE: PRT
 151 <213> ORGANISM: Artificial Sequence
 153 <220> FEATURE:
 154 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
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 158 Gly His Arg Pro
 159 1
 162 <210> SEQ ID NO: 4
 163 <211> LENGTH: 13
 164 <212> TYPE: DNA
 165 <213> ORGANISM: Artificial Sequence
 167 <220> FEATURE:
 168 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
 169 primer
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 172 gggttgttga gaa 13
 175 <210> SEQ ID NO: 5
 176 <211> LENGTH: 644
 177 <212> TYPE: PRT
 178 <213> ORGANISM: Homo sapiens
 180 <400> SEQUENCE: 5
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 184 Ala Trp Thr Ala Asp Ser Gly Glu Gly Asp Phe Leu Ala Glu Gly Gly
 185 20 25 30
 187 Gly Val Arg Gly Pro Arg Val Val Glu Arg His Gln Ser Ala Cys Lys
 188 35 40 45
 190 Asp Ser Asp Trp Pro Phe Cys Ser Asp Glu Asp Trp Asn Tyr Lys Cys
 191 50 55 60
 193 Pro Ser Gly Cys Arg Met Lys Gly Leu Ile Asp Glu Val Asn Gln Asp
 194 65 70 75 80
 196 Phe Thr Asn Arg Ile Asn Lys Leu Lys Asn Ser Leu Phe Glu Tyr Gln
 197 85 90 95
 199 Lys Asn Asn Lys Asp Ser His Ser Leu Thr Thr Asn Ile Met Glu Ile
 200 100 105 110
 202 Leu Arg Gly Asp Phe Ser Ser Ala Asn Asn Arg Asp Asn Thr Tyr Asn
 203 115 120 125
 205 Arg Val Ser Glu Asp Leu Arg Ser Arg Ile Glu Val Leu Lys Arg Lys
 206 130 135 140
 208 Val Ile Glu Lys Val Gln His Ile Gln Leu Leu Gln Lys Asn Val Arg

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209	145	150	155	160
211	Ala Gln Leu Val Asp Met Lys Arg Leu Glu Val Asp Ile Asp Ile Lys			
212	165	170	175	
214	Ile Arg Ser Cys Arg Gly Ser Cys Ser Arg Ala Leu Ala Arg Glu Val			
215	180	185	190	
217	Asp Leu Lys Asp Tyr Glu Asp Gln Gln Lys Gln Leu Glu Gln Val Ile			
218	195	200	205	
220	Ala Lys Asp Leu Leu Pro Ser Arg Asp Arg Gln His Leu Pro Leu Ile			
221	210	215	220	
223	Lys Met Lys Pro Val Pro Asp Leu Val Pro Gly Asn Phe Lys Ser Gln			
224	225	230	235	240
226	Leu Gln Lys Val Pro Pro Glu Trp Lys Ala Leu Thr Asp Met Pro Gln			
227	245	250	255	
229	Met Arg Met Glu Leu Glu Arg Pro Gly Gly Asn Glu Ile Thr Arg Gly			
230	260	265	270	
232	Gly Ser Thr Ser Tyr Gly Thr Gly Ser Glu Thr Glu Ser Pro Arg Asn			
233	275	280	285	
235	Pro Ser Ser Ala Gly Ser Trp Asn Ser Gly Ser Ser Gly Pro Gly Ser			
236	290	295	300	
238	Thr Gly Asn Arg Asn Pro Gly Ser Ser Gly Thr Gly Gly Thr Ala Thr			
239	305	310	315	320
241	Trp Lys Pro Gly Ser Ser Gly Pro Gly Ser Thr Gly Ser Trp Asn Ser			
242	325	330	335	
244	Gly Ser Ser Gly Thr Gly Ser Thr Gly Asn Gln Asn Pro Gly Ser Pro			
245	340	345	350	
247	Arg Pro Gly Ser Thr Gly Thr Trp Asn Pro Gly Ser Ser Glu Arg Gly			
248	355	360	365	
250	Ser Ala Gly His Trp Thr Ser Glu Ser Ser Val Ser Gly Ser Thr Gly			
251	370	375	380	
253	Gln Trp His Ser Glu Ser Gly Ser Phe Arg Pro Asp Ser Pro Gly Ser			
254	385	390	395	400
256	Gly Asn Ala Arg Pro Asn Asn Pro Asp Trp Gly Thr Phe Glu Glu Val			
257	405	410	415	
259	Ser Gly Asn Val Ser Pro Gly Thr Arg Arg Glu Tyr His Thr Glu Lys			
260	420	425	430	
262	Leu Val Thr Ser Lys Gly Asp Lys Glu Leu Arg Thr Gly Lys Glu Lys			
263	435	440	445	
265	Val Thr Ser Gly Ser Thr Thr Thr Arg Arg Ser Cys Ser Lys Thr			
266	450	455	460	
268	Val Thr Lys Thr Val Ile Gly Pro Asp Gly His Lys Glu Val Thr Lys			
269	465	470	475	480
271	Glu Val Val Thr Ser Glu Asp Gly Ser Asp Cys Pro Glu Ala Met Asp			
272	485	490	495	
274	Leu Gly Thr Leu Ser Gly Ile Gly Thr Leu Asp Gly Phe Arg His Arg			
275	500	505	510	
277	His Pro Asp Glu Ala Ala Phe Phe Asp Thr Ala Ser Thr Gly Lys Thr			
278	515	520	525	
280	Phe Pro Gly Phe Phe Ser Pro Met Leu Gly Glu Phe Val Ser Glu Thr			
281	530	535	540	

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283 Glu Ser Arg Gly Ser Glu Ser Gly Ile Phe Thr Asn Thr Lys Glu Ser
284 545 550 555 560
286 Ser Ser His His Pro Gly Ile Ala Glu Phe Pro Ser Arg Gly Lys Ser
287 565 570 575
289 Ser Ser Tyr Ser Lys Gln Phe Thr Ser Ser Thr Ser Tyr Asn Arg Gly
290 580 585 590
292 Asp Ser Thr Phe Glu Ser Lys Ser Tyr Lys Met Ala Asp Glu Ala Gly
293 595 600 605
295 Ser Glu Ala Asp His Glu Gly Thr His Ser Thr Lys Arg Gly His Ala
296 610 615 620
298 Lys Ser Arg Pro Val Arg Gly Ile His Thr Ser Pro Leu Gly Lys Pro
299 625 630 635 640
301 Ser Leu Ser Pro
305 <210> SEQ ID NO: 6
306 <211> LENGTH: 491
307 <212> TYPE: PRT
308 <213> ORGANISM: Homo sapiens
310 <400> SEQUENCE: 6
311 Met Lys Arg Met Val Ser Trp Ser Phe His Lys Leu Lys Thr Met Lys
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314 His Leu Leu Leu Leu Leu Cys Val Phe Leu Val Lys Ser Gln Gly
315 20 25 30
317 Val Asn Asp Asn Glu Glu Gly Phe Phe Ser Ala Arg Gly His Arg Pro
318 35 40 45
320 Leu Asp Lys Lys Arg Glu Glu Ala Pro Ser Leu Arg Pro Ala Pro Pro
321 50 55 60
323 Pro Ile Ser Gly Gly Tyr Arg Ala Arg Pro Ala Lys Ala Ala Ala
324 65 70 75 80
326 Thr Gln Lys Lys Val Glu Arg Lys Ala Pro Asp Ala Gly Gly Cys Leu
327 85 90 95
329 His Ala Asp Pro Asp Leu Gly Val Leu Cys Pro Thr Gly Cys Gln Leu
330 100 105 110
332 Gln Glu Ala Leu Leu Gln Gln Glu Arg Pro Ile Arg Asn Ser Val Asp
333 115 120 125
335 Glu Leu Asn Asn Asn Val Glu Ala Val Ser Gln Thr Ser Ser Ser Ser
336 130 135 140
338 Phe Gln Tyr Met Tyr Leu Leu Lys Asp Leu Trp Gln Lys Arg Gln Lys
339 145 150 155 160
341 Gln Val Lys Asp Asn Glu Asn Val Val Asn Glu Tyr Ser Ser Glu Leu
342 165 170 175
344 Glu Lys His Gln Leu Tyr Ile Asp Glu Thr Val Asn Ser Asn Ile Pro
345 180 185 190
347 Thr Asn Leu Arg Val Leu Arg Ser Ile Leu Glu Asn Leu Arg Ser Lys
348 195 200 205
350 Ile Gln Lys Leu Glu Ser Asp Val Ser Ala Gln Met Glu Tyr Cys Arg
351 210 215 220
353 Thr Pro Cys Thr Val Ser Cys Asn Ile Pro Val Val Ser Gly Lys Glu
354 225 230 235 240
356 Cys Glu Glu Ile Ile Arg Lys Gly Gly Glu Thr Ser Glu Met Tyr Leu

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